

EDITING

Electronic editing is done by putting your master (original) tape on one deck and recording it onto a second deck in a desired sequence. (The edited tape is thus an assembled copy, or second generation). Simply sequential editing is called "assembly." Inserting material in an edit is called an "insert" edit.

Insert editing is a function of more expensive machines as it requires a more complex internal mechanism. Assembly editing is the most rudimentary form and can be done whenever you have two tape decks. The results vary from clean cuts, if the system has an inherent editing function, to mild instability in systems where a dubbing (copying) function is made to serve as an editor.

It is also possible to edit tape manually by actually slicing the tape. However, in electronic editing you preserve the original master and are spared manual labor. (Manual editing is done by chemically developing the top of the tape to find the synch marks and then cutting between them. The edit plays back as a wipe up from the top.)

Generally, the more sophisticated your editing set-up, the less portable it is. Both modes have advantages. On the one hand it's

nice to be able to turn out slick, finished products. On the other, being able to do on the scene crude edits means that community groups can have a cheap, quick, self-contained set-up; and similarly you can go practically anywhere there's an electrical outlet and not have to return to civilization if you don't want to.

Thus, a general editing support system breaks down into three basic levels:

LEVEL ONE: This is the simplest and most flexible editing support system. (We have used Sony equipment here not as an endorsement, but because we know it best. Comparable models from other manufacturers would serve the same function). Pure, basic editing.

At this level your actual Porta-Pak deck is used for playing back the master tape. It feeds into either another Porta-Pak deck (which is thus a complete field system) or the cheapest and most portable table deck.

In the Sony system, this would mean an AV3400 (Porta-Pak) feeding into another AV3400, or into an AV3600, a table model which lists for \$695.

Going from the Porta-Pak to Porta-Pak is essentially a copying system which would allow you to leave a copy on-the-scene and take one with you after you have shot tape with two cameras. Using an AV3600 in place of a second Porta-Pak is both cheaper and frees up the portable for more shooting while people inside

can watch what's been edited.

Typically, Sony has no conception that people would want to edit from a Porta-Pak. Thus, they make no cables to do the job. It's quite simple to wire them up yourself however, for an investment under \$10. Wiring diagrams are next to the pictures of the machines.

LEVEL TWO: At this level your Porta-Pak is not involved and a table deck is used to feed the master reel into a heavier table deck. (Of course you can use two of the cheapest table decks, but for only a few hundred dollars more you get a lot of added flexibility).

The two possible decks shown here are the Sony AV5000 and the Sony AV3650. The AV3650 is a special editing deck which allows you to modulate incoming audio and video signals (other decks have what's called Automatic Gain Control which does the modulation automatically). While the edits you get are perfectly clean, there is a problem with the sound which lags a second or two. Thus, your sound kicks out or in before or after your video.

At this writing, the AV3650 is the latest of the Sony line. Previously, the AV500 offered maximum control. Its features include slow-motion and still-framing, a manual video gain control, and color record and playback (see COLOR for state-of-the-art in portable color systems). The AV3650 does not have color. The AV3650

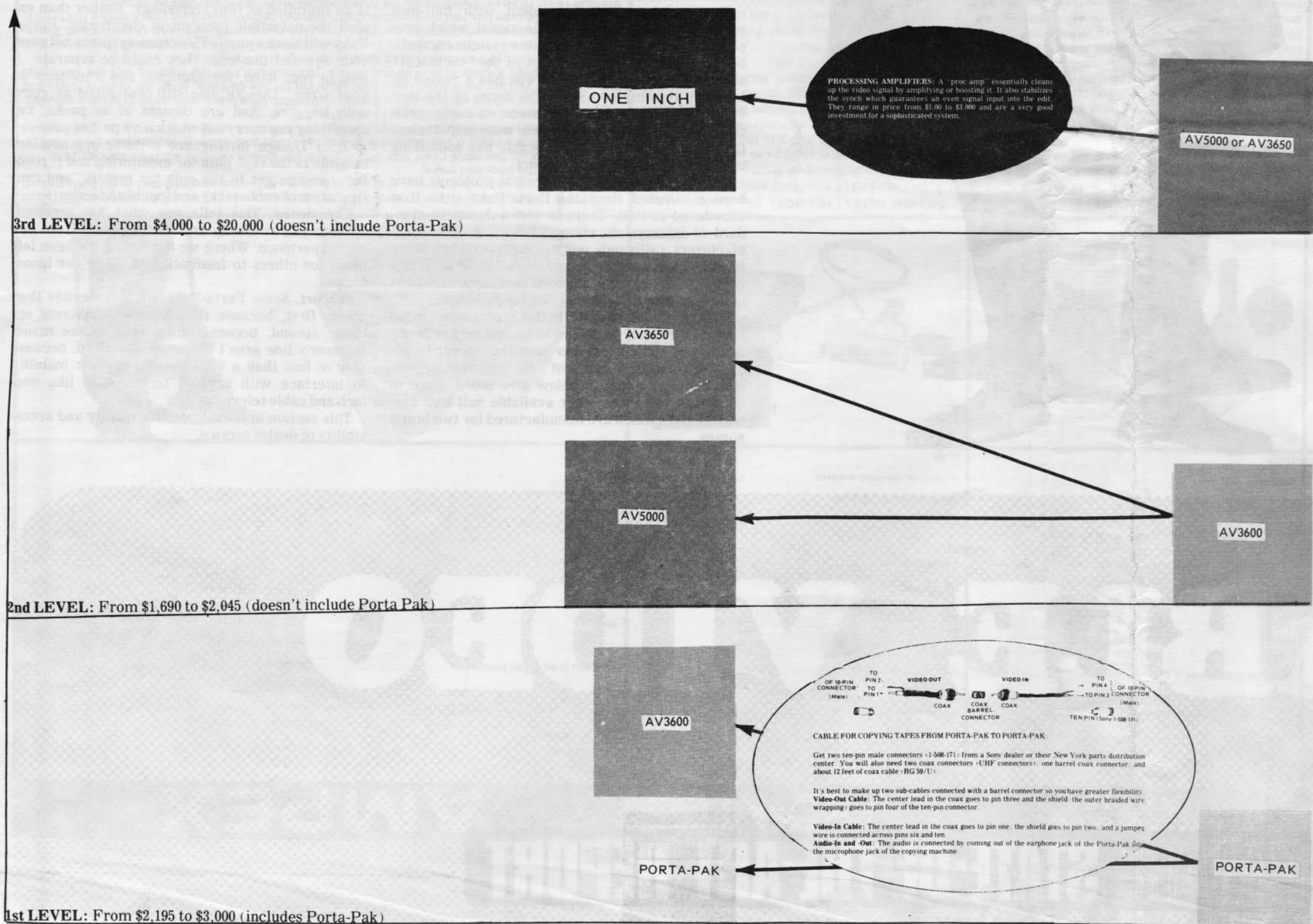
lists for \$995, while the AV5000 goes for \$1,350. Unless you need color the AV3650 is by far and away the best thing to get.

LEVEL THREE: Here you use a half-inch table deck (actually any of the three mentioned) to feed into a one-inch machine. A good one-inch machine has perfect assembly edits and optional perfect insert edits. Most have two audio channels as well, along with controls over both audio and video modulation. One-inch machines are also upgradable to color with plug-in modular circuit boards.

The advantage of one-inch is you're practically assured a perfect master, especially if you run the incoming signal through a processing amplifier (which essentially cleans the signal up and stabilizes the synch).

The disadvantages are that one-inch is non-portable and much costlier. They range in price from \$3,000 to \$19,000. One-inch tape is also much more expensive than half-inch (\$60 an hour versus \$30) and there is no intersystem compatibility as in half-inch. Thus, with a one-inch master you've got to find a one-inch machine of the same make.

As for experience, we've only used a Craig which worked well. However, Videofreex have their own one-inch IVC and say they get good results with it.



SPECIAL EFFECTS

A SPECIAL EFFECTS GENERATOR: A special effects generator mixes camera signals and produces a composite image of either fades and dissolves (images superimposed) or wipes (one pushing the other off the screen).

The Sony Seg-1 (\$595) will mix two cameras at once but has inputs for four. Thus, you can have a four camera system with two being recorded at any one time.

Special effects systems will use the Porta-Pak cameras (and feed into a Porta-Pak deck) so if you've got a lot of indoor shooting they're a good investment and a whole different way to do video. The Sony also has a negative switch to reverse black-and-white in the image.

Remember though that for every camera you feed into the system you need a separate monitor to see what's coming in. Thus, if you have a four camera set-up you need five monitors, one each for the cameras, and one for the composite image.

GEN-LOCK: A Gen-Lock system allows you to mix a live and a tape signal. Mixing two tape signals is impossible in half-inch technology (although you can do it optically by playing back on two separate monitors and shooting off the screens and mixing through an SEG).

It works by the live camera synching-up with the tape signal which drives the system. It's simplest use in is in titling. Cheap ones start at \$400.

COLORIZER: These simply are no color portables. You can, however, add color electronically to prerecorded black and white tape with a colorizer which feeds color information to the existing signal.

The effects range from almost natural colors to wild solarized tones which can look very good. Most colorizers are custom made. (CTL Electronics in New York City lists their at \$950.)

TAPE DELAY: This is a mechanical set-up which can be enormously effective. As in this drawing, all you do is position two decks next to each other, record on one, and playback on the other. The actual time delay is a function of the distance between the decks. If you have two playback decks you can have two delays; three, three delays, and so on. You can also do a sound delay just by hooking up the microphone. Very freaky, mesmerizing effects.

Typically, Sony has no idea that anyone would want to do this. Thus, their old system decks (CV series), which were perfect for delays because of the configuration of the controls, have been discontinued while the new series (AV) is designed so the tape path is obstructed by the control lever when you try to feed from one deck to another. But CV decks are going very cheap so if you can get a couple (last we heard \$295) you can do delays.

